Economy Continues to Grow in July; PMI Rises to 51.8%; Production up Sharply

JULY REPORT

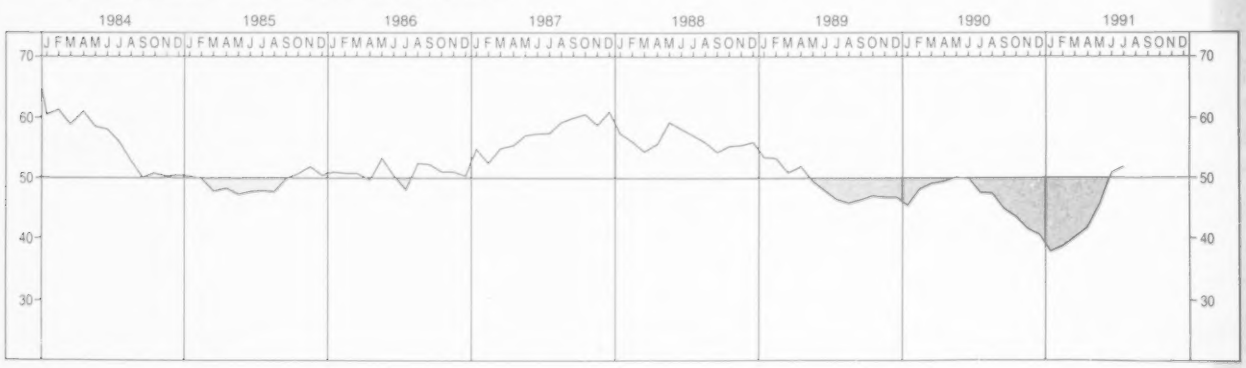
Analysis by the National Association of Purchasing Management Business Survey Committee; chair, Robert J. Bretz, C.P.M., director of corporate purchasing, Pitney Bowes, Inc.

The manufacturing economy grew in July, for the second consecutive month, say the nation's purchasing executives in their latest **Report on Business.** Production expanded sharply for the second consecutive month. New Orders increased in July for the third consecutive month, but at a lesser rate of growth than in June. New Export Orders also continued to grow in July although at a lower rate of growth than in June. Imports continued to decline for the 15th consecutive month.

The Employment Index declined in July for the 30th consecutive month. The Supplier Deliveries Index increased in July, indicating slower Supplier Deliveries for the first time since August 1990. The Inventories Index declined in July for the 32nd consecutive month, although at a lesser rate of decline than in the previous three months. Prices declined again for the seventh consecutive month, at a slightly greater pace than in June. The Producer Price Index should continue to post declines and the Consumer Price Index should continue to register smaller increases for several months.

The **Report** was issued by Robert J. Bretz, C.P.M., chairman of the National Association of Purchasing Management's Business Survey Committee, and director of corporate purchasing at Pitney Bowes, Inc. Said Bretz, "The economy entered the third quarter by continuing the neophyte recovery. Although Production rose sharply in July, the growth in New Orders was not as rapid as in the past two months. Nevertheless, with New Orders still growing and Inventories at relatively low levels, the economy should continue to grow at a moderate, if not robust pace over the months ahead."

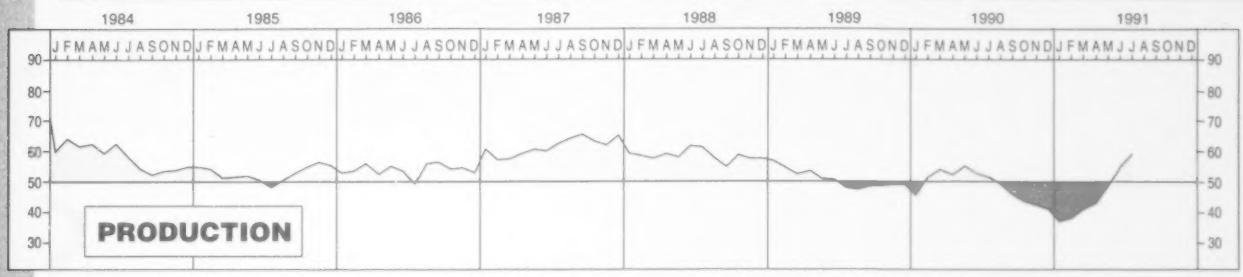
PURCHASING MANAGERS' INDEX



PURCHASING MANAGERS' INDEX (PMI)

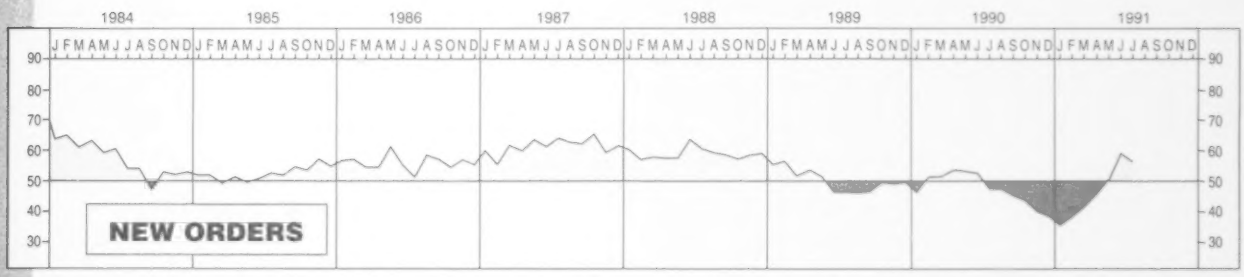
July '90	47.6	February '91	38.5
August '90	47.4	March '91	40.0
September '90	44.9	April '91	42.1
October '90	43.6	May '91	45.4
November '90	41.6	June '91	50.9
December '90	40.5	July '91	51.8
January '91	37.7		

The Purchasing Managers' Index (PMI) rose to 51.8%, up from 50.9% in June. This is the sixth consecutive month the PMI has increased from the previous month and the second consecutive month it has registered over 50%, since slipping below in June 1990 (49.9%). A reading above 50% indicates that the manufacturing economy is generally expanding; below 50%, that it is generally declining. Bretz added, "The PMI averaged 43.8% for the first seven months of 1991. Past experience indicates this would be consistent with zero growth in the overall economy. However, if the PMI remains unchanged at the July level for the balance of the year, then past experience also indicates this would be consistent with real GNP growth of approximately 1% for all of 1991."



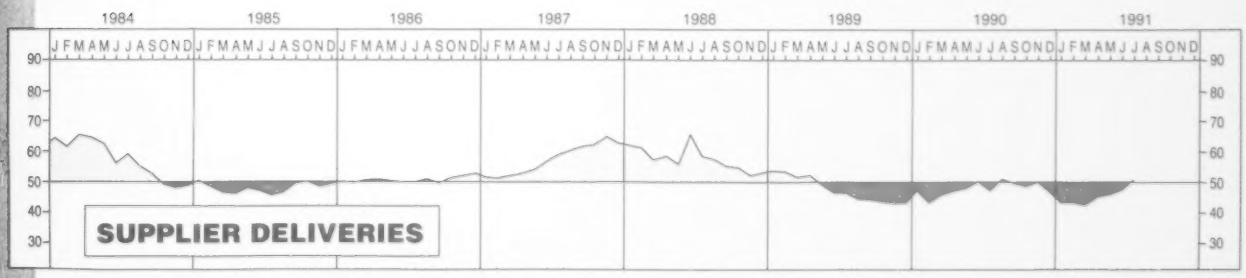
Production grew in July for the second consecutive month after declining in the previous 10 months. The Production Index rose to 59.5%, up from 55.0% in June, to its highest level since July 1988 (61.2%). Given the sustained growth in New Orders in July, growth in Production should also continue.

Production	%Better	%Same	%Worse	Net	Index
July 1991	29	53	18	+11	59.5
June 1991	31	51	18	+13	55.0
May 1991	21	57	22	-1	48.8
April 1991	17	60	23	-6	43.1



New Orders increased in July for the third consecutive month, although at a lesser rate than in June. The New Orders Index fell to 56.3%, down from 59.1% last month. Nevertheless, the increase in New Orders is more than sufficient to create continued growth in Production and the economy in the months ahead.

New Orders	%Better	%Same	%Worse	Net	Index
July 1991	31	46	23	+8	56.3
June 1991	38	42	20	+18	59.1
May 1991	28	47	25	+3	50.6
April 1991	26	49	25	+1	45.9



The Supplier Deliveries Index increased in July after 10 consecutive months of decline. The increase to 50.8% confirms the economy is growing and that suppliers are making slower deliveries. The increase in the index also suggests inventories are not being reduced at as great a rate as in the previous three months.

Supplier Deliveries	%Slower	%Same	%Faster	Net	Index
July 1991	7	88	5	+2	50.8
June 1991	4	86	10	-6	47.5
May 1991	3	87	10	-7	46.0
April 1991	3	84	13	-10	45.1

IN SHORT SUPPLY

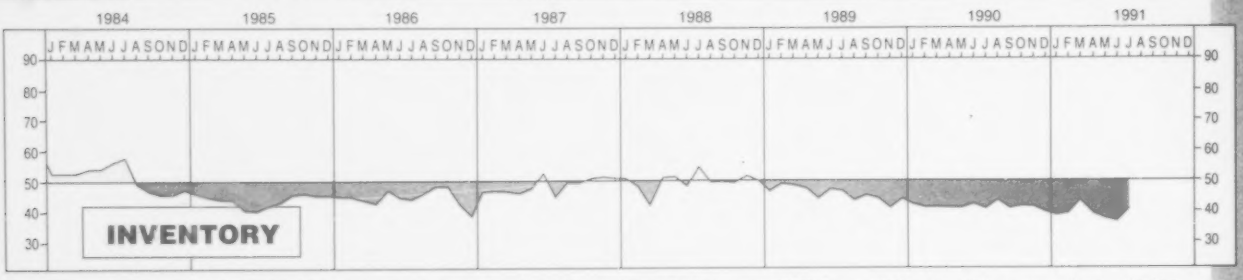
Bearings - 35th time in 36 months, generally only in military specification grade; **Caustic Soda/Soda Ash** - 50th consecutive month (used heavily in paper making, petroleum refining, and soap making); **Lumber** - 2nd consecutive month, essentially only in the Northwestern U.S., where conservationists' efforts have been successful in reducing the Douglas Fir acreage the government will allow to be cut, causing shortages in lumber, chips for paper mills, and threatened reduction of log exports to the Pacific Rim.

UP IN PRICE

Silver - 2nd consecutive month; **Tin; Rosin-based Chemicals** - 4th consecutive month; **Textile Dyes** - Used to color textiles; **Polyvinyl Chloride Resin** - Used in making Polyvinyl Chloride (PVC); **Lumber** - 2nd consecutive month; **Solid Bleached Sulfate (SBS); Silica; Lube Additives** - After being reported down in price in May for 2nd time in 3 months; **Turkey Meat; High Fructose Corn Syrup** - 4th consecutive month; **Orange Juice** - 2nd consecutive month; **Sugar** - 2nd consecutive month, after being reported down in price in May for 9th time in 10 months (used heavily in food and beverage processing).

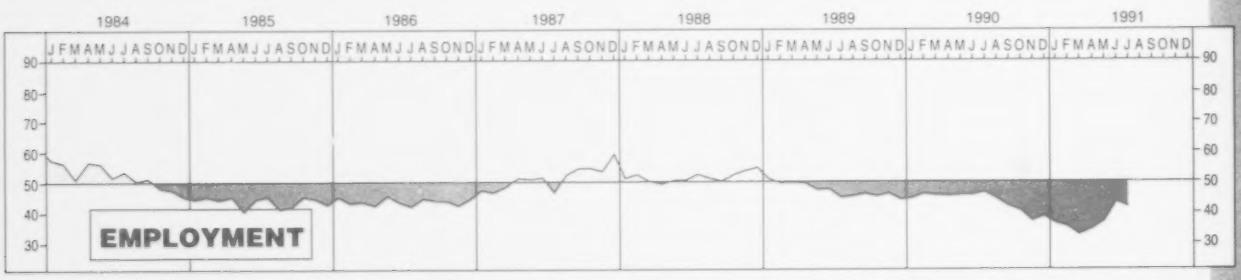
DOWN IN PRICE

Aluminum - 9th consecutive month; **Bronze; Copper** - 9th consecutive month, some reports of price increases; **Magnesium** - 6th consecutive month; **Nickel** - 2nd consecutive month, after being reported up in price in May for 2nd consecutive month; **Silicon Metal; Steel** - 6th consecutive month; **Steel Scrap** - 9th consecutive month; **Steel Pipe; Zinc** - 12th consecutive month; **Uncoated Offset Paper**



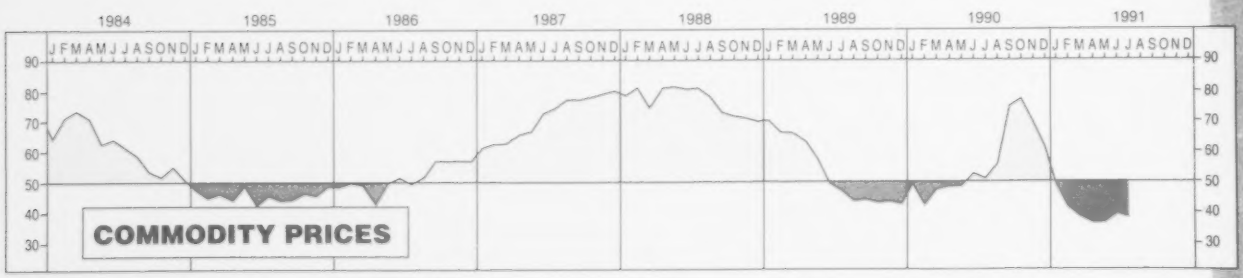
Inventories declined in July for the 32nd consecutive month, although the rate of decline was the lowest since March 1991. The Inventories Index rose to 40.7%, up from 36.7% in June, which was the lowest since January 1983 (36.3%). Reductions in the rate of inventory decline should continue and this will provide further growth to the economy.

Inventories	%Higher	%Same	%Lower	Net	Index
July 1991	12	51	37	-25	40.7
June 1991	14	47	39	-25	36.7
May 1991	13	49	38	-25	37.5
April 1991	14	53	33	-19	39.0



Employment, a lagging indicator, declined in July for the 30th consecutive month. The Employment Index fell to 41.7% in July, down from 43.3% in June. As in past economic recoveries, Employment will be one of the last indicators to turn positive and grow.

Employment	%Higher	%Same	%Lower	Net	Index
July 1991	12	62	26	-14	41.7
June 1991	14	61	25	-11	43.3
May 1991	5	65	30	-25	37.0
April 1991	8	57	35	-27	34.4



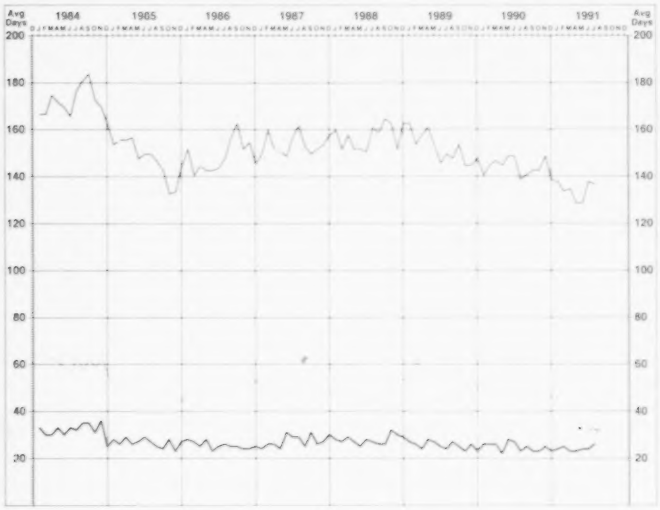
Prices, a lagging indicator, continued to decline in July for the seventh consecutive month. The Price Index slipped to 38.3% in July, down from 39.5% last month. Members reported resisting price increases being proposed by suppliers. It is more likely that the Price Index will increase rather than decrease as the economy continues to improve in the months ahead.

Prices	%Higher	%Same	%Lower	Net	Index
July 1991	5	66	29	-24	38.3
June 1991	6	66	28	-22	39.5
May 1991	5	64	31	-26	36.9
April 1991	10	60	30	-20	36.3

- 7th consecutive month; **Corrugated Shipping Containers** - 17th time in 18 months; **Wood Pulp** - 5th consecutive month; **Cotton Fabric** - After being reported up in price in May for 5th consecutive month; **Leather; Acetone** - After being reported up in price in June; **Benzene; Ethylene** - 6th consecutive month (used heavily in making ethylene oxide, plastic resins, and glycols); **Ethylene Derivatives; Glycerine** - 5th time in seven months; **Methanol** - 3rd consecutive month, after being reported up in price for 3rd consecutive month in April 1991; **Phthalic Anhydride** - 4th time in 6 months (used heavily in making artificial resins, benzoic acid, and phthalates); **Sodium Chlorate** - Used heavily in papermaking and dyeing; **Sulfur; Toluene** - 7th time in 8 months (used heavily in making explosives, dyes, and benzoic acid, as a solvent in paint and as a gasoline additive); **Xylene** - 6th time in 8 months; **Plastic Resins** - 5th consecutive month; **Plastic Products** - 3rd consecutive month; **Polyethylene** - 5th consecutive month (used heavily in making plastic packaging materials, kitchenware, tank and pipe linings paper coatings, and textile stiffeners); **Polypropylene** - 7th consecutive month; **Propylene** - 6th consecutive month (used heavily in making polypropylene plastic and acetone, isopropyl alcohol, phenol, propylene oxide, and other chemicals) **Styrene** - 8th consecutive month; **Capacitors; 1 Megabyte DRAMS** - After being reported up in price in June for 5th consecutive month; **4 Megabyte DRAMS; Bottle Glass** - 3rd time in 5 months; **Diesel Fuel; Gasoline; Natural Gas** - 7th consecutive month; **Propane; Corn** - 3rd consecutive month, after being reported up in price for the 3rd consecutive month in April 1991; **Black Pepper** - Used in food processing; **Apple Juice** - After being reported up in price in June; **Tomato Paste** - 2nd consecutive month (used heavily in food processing).

BUYING POLICY

Leadtimes for Capital Expenditures changed only slightly in July, moving down to 137 days from 138 days in June. This lagging indicator was one of the last to turn down during the recession and will probably be one of the last to turn up in the economic recovery. Average leadtimes for Production Materials lengthened in July to 47 days, up from 44 days in June, but the same as the February to May 1991 average. Leadtimes for Maintenance, Repair, and Operating (MRO) Supplies increased to 26 days in July, up from 24 days in both June and May, and the most since June 1990 (27 days).

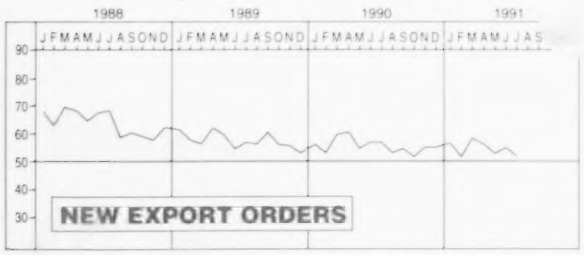


PERCENT REPORTING

Capital Expenditures	Hand to Mouth	30 Days	60 Days	90 Days	6 mos. and Longer	1 year + Days	Avg. Days
July 1991	12	6	15	23	30	14	137
June 1991	11	8	12	24	31	14	138
May 1991	14	8	11	24	32	11	129
April 1991	12	9	16	19	33	11	129

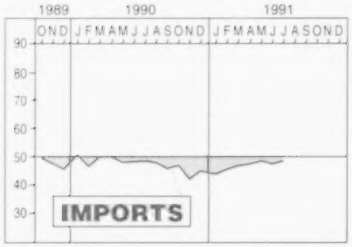
Production Materials	Hand to Mouth	30 Days	60 Days	90 Days	6 mos. and Longer	1 year + Days	Avg. Days
July 1991	19	43	28	6	2	2	47
June 1991	19	44	26	8	2	1	44
May 1991	21	40	27	8	2	2	47
April 1991	18	42	26	11	2	1	46

MRO Supplies	Hand to Mouth	30 Days	60 Days	90 Days	6 mos. and Longer	1 year + Days	Avg. Days
July 1991	41	45	11	2	1	0	26
June 1991	42	45	10	3	0	0	24
May 1991	45	43	7	5	0	0	24
April 1991	47	40	10	3	0	0	23



New Export Orders continued to expand in July. The New Export Orders Index, not seasonally adjusted, dropped to 52.5%, down from 55.0% last month, and the lowest since February 1991 (52.0%). Members exporting remained at 78% for the third straight month.

New Export Orders	%Exporting	%Better	%Same	%Worse	Net	Index
July 1991	78	18	69	13	+5	52.5
June 1991	78	24	62	14	+10	55.0
May 1991	78	18	70	12	+6	53.0
April 1991	75	22	69	9	+13	56.5



Imports declined for the 15th consecutive month. The Imports Index, not seasonally adjusted, rose to 48.0%, up slightly from 47.5% in June, but the same as in May. The percentage of members importing was 78, which was slightly higher than the past three months (77%).

Imports	%Importing	%Higher	%Same	%Lower	Net	Index
July 1991	78	11	74	15	-4	48.0
June 1991	77	9	77	14	-5	47.5
May 1991	77	10	76	14	-4	48.0
April 1991	77	9	76	15	-6	47.0

DATA AND METHOD OF PRESENTATION

The **Report on Business** is based on data compiled from monthly replies to questions asked of purchasing executives in over 300 industrial companies. Membership of the Business Survey Committee is diversified geographically, based on value added by state, and by Standard Industrial Classification (SIC) category, based on each industry's contribution to Gross National Product (GNP). Twenty industries in 50 states are represented on the committee.

Survey responses reflect the change, if any, in the current month compared to the previous month. For each of the indicators measured [New Orders, New Export Orders, Imports, Production, Supplier Deliveries, Inventories, Employment and Prices], this report shows the percentage reporting each response, the net difference between the number of responses in the positive economic direction (higher, better and slower for Supplier Deliveries), and the negative economic direction (lower, worse and faster for Supplier Deliveries), and the diffusion index.

Responses are raw data and are never changed. The diffusion index includes the percent of positive responses plus one-half of those responding the same (considered positive). The resulting single index number is then seasonally adjusted to allow for the effects of repetitive intra-year variations resulting primarily from normal differences in weather conditions, various institutional arrangements and differences attributable to non-moveable holidays. All seasonal adjustment factors are supplied by the U.S. Department of Commerce and are subject annually to relatively minor changes when conditions warrant them. A sufficient history is not yet available for the New Export Orders and Imports Indexes to determine seasonal adjustment factors. Therefore, these two indexes are not seasonally adjusted. The Purchasing Managers' Index (PMI) is a composite index based on the seasonally adjusted diffusion indexes for five of the indicators (New Orders, Production, Supplier Deliveries, Inventories and Employment) with varying weights applied.

Diffusion indexes have the properties of leading indicators and are convenient summary measures showing the prevailing direction of change and the scope of change. An index reading above 50% indicates that the economy is generally expanding; below 50% that the economy is generally declining. The distance from 50% is indicative of the strength of expansion or decline.

Responses to Buying Policy reflect the percent reporting the current months lead time, the approximate weighted number of days ahead for which commitments are made for Production Materials, Capital Expenditures and Maintenance, Repair and Operating (MRO) Supplies, expressed as hand-to-mouth (5 days), 30 days, 60 days, 90 days, 6 months (180 days), a year or more (360 days) and the weighted average number of days. These responses are raw data, never revised and not seasonally adjusted since there is no significant seasonal pattern.